

REMARKS

Applicants have updated the related cases by inserting the corresponding serial numbers:

Applicants acknowledge with appreciation that the following rejections have been withdrawn:

35 U.S.C. 112 second paragraph rejection of Claims 6 and 19-22;

35 U.S.C. 103(a) rejection of Claims 1-6, 8-9 and 11-31 as being unpatentable over Aylward et al (U.S. Patent No. 6,017,686) in view of Harrison et al (U.S. Patent No. 5,100,862); and

35 U.S.C. 103(a) of Claims 7 and 10 as being unpatentable over Aylward et al (U.S. Patent No. 6,017,686) in view of Harrison et al (U.S. Patent No. 5,100,862) and further in view of Bourdelais et al. (U.S. Patent No. 6,326,109).

Claims 1-3, 5-6, 9, 11-13, 15-16, 20, 23 and 28-29 continue to stand rejected under 35 U.S.C. 103(a) as being unpatentable over Onderkirk et al (U.S. Patent No. 5,825,543) in view of Harrison et al (U.S. Patent No. 5,100,862).

Applicants wish to thank the Examiner for the courtesy of a telephone interview on Wednesday May 12, 2004 at 3:45 pm. The interview related to this application and also to Serial No. 10/020,404. The discussion focused on claim 1 of this application and the rejection pursuant to 35 USC 103 based on Allen et al. (US 5,825,543) and the similar rejection of claim 1 based on Onderkirk et al. (U.S. 5,825, 543) in the related case. Both Allen et al. and Onderkirk et al. relate to inventions by the same general group of inventors and are directed to reflective polarizer construction. Present at the interview were inventors Cheryl Brickey, Mike Brickey, and Rob Bourdelais, in addition to the undersigned and Examiner Marc Patterson. Provided by hand delivery to the Examiner in advance of the interview were sample films as described in the attached Declaration of Cheryl J. Brickey. The Examiner is respectfully requested to include the interview samples with the enclosed Declaration. Separate samples will be provided for the Declaration in Serial No. 10/020,404.

As explained by Ms Brickey, the Allen and Onderkirk optical elements are reflective polarizers. The element of Allen/Onderkirk is comprised of a continuous phase of a given refractive index and a discontinuous phase

having in one direction a refractive index similar to the continuous phase and in the orthogonal direction a refractive index different from the continuous phase. This has the effect of being transparent to light of one polarization and reflective of light of the orthogonal polarization. Since at least half of the light is reflected, the element cannot satisfy the light transmission efficiency of the present claims. Further, the presence of air voids would serve to prevent some of the desired light from being transmitted, further increasing the reflection.

Claim 1 is clearly delimited over the teachings of Onderkirk. The diffuse light transmission is at least 65 % and the light transmission efficiency (percent diffuse transmission / percent total transmission) is at least 80%. Table 1 of the application demonstrates that the invention achieves these levels or higher.

According to the Summary of the Invention, the Onderkirk reference is directed to a reflective film and particularly to a reflective polarizer. A reflective polarizer is arranged so that it transmits the portion of light that is correctly polarized and reflects the other half of the light in an attempt to reorient that light and obtaining a further portion of the light that is desirably polarized after reflection. Through the use of birefringent materials such as organics of directionally dependent refractive index, the film will transmit light polarized in one direction but reflect light polarized in the orthogonal direction. Since Allen only transmits light of one polarization and reflects the rest, the maximum transmission is 50%, and this would be further reduced by other inefficiencies in the optical element.

Referring to the Part A, results shown in the table at page 6 of the Declaration, the present invention provides a much higher total transmission, diffuse transmission and diffuse transmission efficiency than does the reflective polarizer of Allen or Onderkirk.

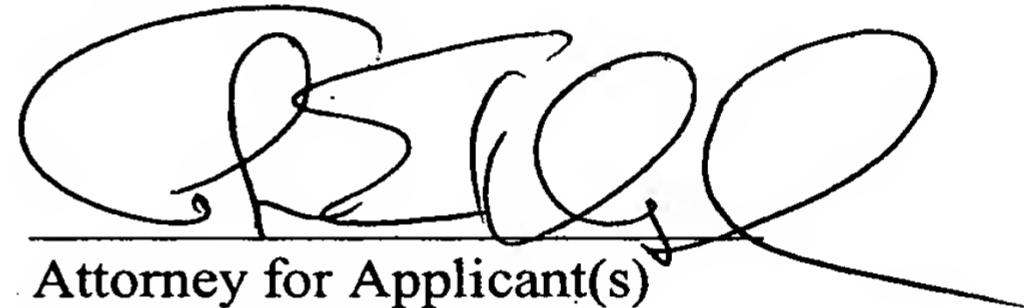
Turning further to the part B results of the Declaration, it is clear that one cannot merely adjust the thickness of the layer to get the desired total transmission and diffusion since they cannot both be raised simultaneously through thickness variation.

In summary, Claim 1 is distinguished over Onderkirk, at least by the elevated transmission and diffuse efficiency. This makes sense because Onderkirk would not go to all of the trouble to pass only light polarized in a desired direction and then undo that accomplishment by diffusing the light as it

passes through. Since diffusion is counter to the objective of Onderkirk, and since Onderkirk cannot transmit more than 50% of the incident light, and since diffusion is not consistent with the object of his device, it would not be obvious to modify Onderkirk to achieve the transmission and diffuse transmission levels of the claims.

It is believed that this amendment places the application in condition for allowance or in better form for appeal. The Examiner is respectfully requested to reconsider the outstanding rejection in light of the foregoing remarks and to withdraw the outstanding rejection and to pass the subject application to Allowance.

Respectfully submitted,

A handwritten signature consisting of stylized initials and a surname, appearing to read "A. E. Kluegel".

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